

REMARKS

The Office Action dated June 9, 2009 (hereinafter, “Office Action”) has been reviewed and the Examiner’s comments considered. Claims 25-59 are pending in this application. No amendments are presented herein. Applicant acknowledges with appreciation the withdrawal of the previous rejections in view of the arguments presented on February 10, 2009.

Rejections under 35 U.S.C. § 103

Claims 25-34, 36-39, 40-43, 44-48, and 50-53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USPN 5,741,327 to Frantzen (hereinafter “Frantzen”). Claims 35 and 49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frantzen in view of WO 99/43378 to Leonhardt (hereinafter “Leonhardt”). Claims 54-59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frantzen in view of USPN 6,270,524 to Kim (hereinafter “Kim”) in further view of USPN 6,712,844 to Pacetti (hereinafter “Pacetti”). Applicant respectfully traverses these rejections.

Independent claim 25 recites, *inter alia*, “[a] tubular radially expandible metal structure ... each bridge including a portion having a second electrical conductivity at least an order of magnitude lower than the first electrical conductivity, the bridges distributed throughout the length of the tubular structure and configured and arranged to divide the tubular structure into axially spaced and electrically insulated sections.”

Independent claim 44 recites, *inter alia*, “[a] method ... comprising ... furnishing said bridges between each ring and its adjacent ring with a portion having a second electrical conductivity at least an order of magnitude lower than the first electrical conductivity, the bridges distributed throughout the length of the tubular structure, arranged and configured to divide the tubular structure into axially spaced and electrically insulated sections.”

The Office Action alleges that Frantzen discloses a plurality of expandible rings arranged adjacent one another along a longitudinal axis, each of the rings defining at least one bridge strut (120, 60), the bridge strut having a first electrical conductivity, each bridge including a portion

having a second electrical conductivity, the bridges distributed throughout the length of the structure and configured and arranged to divide the structure into axially spaced and electrically insulated sections. Office Action, p. 3.

Applicant submits that a *prima facie* case of obviousness is not established at least because Frantzen fails to show or describe: 1) the claimed bridges distributed throughout the length of the tubular structure, as well as 2) the claimed second electrical conductivity at least an order of magnitude lower than the first electrical conductivity.

1. Bridges Distributed Throughout A Length Of The Tubular Structure

Frantzen discusses his invention as providing separate radiopaque marker elements for attachment to the ends of the stent in order to allow the ends of the stent to be readily viewable by a fluoroscope or other imaging device. Each marker element is mechanically attached to an end of the stent with an axial center of the marker element coextensive with a central axis of the stent, and is configured to be radially expandable in a manner similar to the radial expansion of the stent itself. Thus, the presence of the marker element adjacent an end or ends of the stent does not inhibit the radial expansion thereof. The marker elements are attached to the ends of the stent in positions beyond the ends of the stent so that when a marker element is attached to both ends of the stent, the stent can be viewed with an imaging device and the maximum extent and precise position of the stent can be accurately determined. Frantzen, col. 2:31-53.

The Office Action cites to Frantzen elements 120 and 60 in support of the claimed elements “each of the rings defining at least one bridge strut.” Frantzen shows in FIG. 15 (reproduced below) a series of outside tabs 120 located on the adjacent side 106 of the extended marker element 100. The extended marker element 100 is interchangeable with the locking marker element 70 on the prepped stent 50. The extended marker element extends “significantly beyond the ends of the prepped stent 50 enhancing an axial length of the prepped stent 50 and extended marker element combination.” Frantzen, col. 10:14-26, emphasis added. The outside tab 120 is secured to receiver

60 along fusion line 126 either by melting of the knob 124 by heat from a laser or by brazing.
Frantzen, col. 10:59-63.

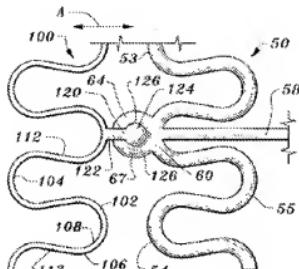


Fig. 15

Thus, even assuming *arguendo* that Frantzen shows “each of the rings defining at least one bridge strut...adjacent rings linked by at least one bridge formed by cooperation between adjacent bridge struts on adjacent rings,” it is clear from the Frantzen description and drawings that Frantzen does not show “bridges distributed throughout the length of the tubular structure and configured and arranged to divide the tubular structure into axially spaced and electrically insulated sections” as recited in independent claims 25 and 44. That is, to the extent that Frantzen includes bridges, they are only located at the ends of the stent, rather than distributed throughout the length of the tubular structure as claimed.

2. Second Electrical Conductivity At Least An Order Of Magnitude Lower

The Office Action admits that Frantzen fails to disclose a portion of the bridges having a second conductivity at least an order of magnitude lower than the first electrical conductivity. However, the Office Action alleges that Frantzen teaches a nitinol stent and that “the first electrical conductivity portion (100) is made of gold or silver.” Office Action, p. 3. Thus, the Office Action finds support for the first electrical conductivity in the marker element 100 made of gold or silver, and for the second electrical conductivity in the stent 50 made of nitinol. The Office Action

concludes in view of the Instant Specification that “titanium alloys have a relatively low electrical conductivity in comparison with gold or silver which has a high conductivity.” Office Action, p. 3.

While Applicant agrees that titanium alloys have a relatively low conductivity compared to gold and silver, the claimed invention is not obvious in view of the Frantzen disclosure that, by the Office Action’s conventions, shows the *opposite* relationship to that claimed.

Independent claims 25 and 44 recite “each of the rings defining one bridge strut and having a first electrical conductivity. . . [each bridge including] a portion having a second electrical conductivity at least an order of magnitude lower than the first electrical conductivity.” In other words, the rings and defined bridge strut have the higher first electrical conductivity and a portion of the bridge has a lower second electrical conductivity. The Office Action cites, oppositely, to the stent material (alleged rings defining one bridge strut) having the lower conductivity and the markers (alleged portion of the bridge) having the higher conductivity. Applicant respectfully submits that a showing of an opposite relationship in electrical conductivity would not lead one of ordinary skill in the art to arrive at the claimed relationship. In other words, there is nothing in the Frantzen disclosure that would lead one of ordinary skill in the art to provide a bridge portion having a second conductivity at least an order of magnitude lower than that of the stent material. This is at least due to the fact that the relatively higher relationship is inherent in the radiopacity of the Frantzen marker material (i.e., one of skill in the art would not look to make the bridge material an order of magnitude lower than that of the stent).

Accordingly, in view of the above, Applicant submits that Frantzen fails establish a *prima facie* case of obviousness with respect to independent claims 25 and 44. Therefore, Applicant submits that independent claims 25 and 44, and claims 26-34, 36-39, 40-43, 45-48, and 50-53 depending therefrom, are patentable over Frantzen, and respectfully request favorable reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

Regarding claims 35 and 49 (Frantzen/Leonhardt) and claims 54-59 (Frantzen/Kim/Pacetti), without conceding the propriety of the asserted combinations, or the allegations made in the Office

Action, Applicant submits that each of claims 35, 49, and 54-59 depends from a patentable independent claim, in view of the above, and is therefore patentable. Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of these rejections under 35 U.S.C. § 103.

Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

It is noted that the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between the cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein should not be construed to prejudice or foreclose future consideration by Applicant of additional or alternative distinctions between the claims of the present application and the references cited by the Examiner and/or the merits of additional or alternative arguments.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-2191 referencing docket no. 101671.0006P. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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